

132KV Grid Connection



Stangate Landfill, Kent

With the potential to generate up to 5MW of renewable energy from landfill gas at Stangate the possibility of this becoming a reality was thwarted by expensive grid connection costs to the local 33kV distribution network many kilometres away.

Powersystems then surveyed the site and negotiated a connection to the 132kV overhead line that passed within 300m of the generation compound. The connection costs were reduced by a third and the project became commercially viable.

The 132kV connection was then carried out by Powersystems as a contestable works package with only the final connection to the 132kV line carried out by the local electricity board.



Stangate 132kV Substation compound



132kV Connection point



132kV Disconnectors

The new 132kV substation compound and switch rooms were designed and constructed by Powersystems to house the substation equipment.

Within the 132kV substation Powersystems supplied and installed the following equipment,

- ▶ 132kV terminal tower
- ▶ 1No 6MVA 132/11KV transformer
- ▶ 132kV circuit breakers
- ▶ 132kV disconnectors
- ▶ 132kV overhead busbar system
- ▶ 5 panels of 11kv switchgear
- ▶ Auxiliary power transformer
- ▶ Protection panels
- ▶ Battery Chargers
- ▶ 11kv cables
- ▶ Building lighting and power
- ▶ Substation earthing

The complete installation was tested and commissioned by Powersystems engineers to the clients and SEEBoards satisfaction.